



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SWA25A-3-OH
Job Sheet OH196926



Part No: SWA25A-3-OH

Job Qty: 1 pcs

Part Name: Electric Swivel 25,000 lb Safe Work Load (11,340 Kg)

Order 17320



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/25/19

Job Tracking No:

Due Date: 8/7/19

Created By: Jennifer Renwick

Type: Rework - OH

Description: RA720 / Order / Orig# AC11003

Note: DWG O&OPM-SWA25A Rev. 2 IPP Rev. A 18.09.05 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	External Load - Issue SN	1 pcs	8/7/19	8/7/19	0.00	1.00	External Load - 1		<i>5193597 JR</i>
							External Load - 2		
							External Load - 3		
115	External Load - 2 - B4B	1 pcs	8/7/19	8/7/19	0.00	1.00	External Load - 1 - B4B		<i>AD 2019/07/16 Mickel 2019-7-25</i>
							External Load - 2 - B4B		
							External Load - 3 - B4B		
120	QC 5	1 pcs	8/7/19	8/7/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
130	Customer Acceptance	1 pcs	8/7/19	8/7/19	0.00	0.00			
140	Outsource - 2 - NDT per QSI038	1 pcs	8/7/19	8/7/19			SKY002-VC	5	<i>AD 2019-07-17</i>
150	Packaging 2-1 - Receive - B4B	1 pcs	8/7/19	8/7/19	0.00	0.00	Packaging 2 - 1 - B4B		<i>DP JUL 19 2019</i>
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S193597



Part: SWA25A-3

Job No: OH196926

Serial No/Batch: AC11003

Revision: 2

Inspector:

Exp Date:

Instructions:

Date: 07/16/19

					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
160	QC 6	1 pcs	8/7/19	0.00 0.00	QC 6 - 9	
					QC 6 - 68	
					QC 6 - 61	DAS
					QC 6 - 40	61
190	External Load - 4 - B4B	1 pcs	8/7/19	0.00 1.33	External Load - 1 - B4B	Mod 2019-7-25
					External Load - 2 - B4B	AP 2019/07/25
					External Load - 3 - B4B	
195	QC 5	1 pcs	8/7/19	0.00 0.00	QC 5 - 10	
					QC 5 - 12	
					QC 5 - 17	
					QC 5 - 18	
					QC 5 - 19	
					QC 5 - 22	
					QC 5 - 24	
					QC 5 - 3	
					QC 5 - 43	
					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	
					QC 5 - 50	
					QC 5 - 30	DAS
					QC 5 - 40	30
200	Packaging 3-1 - Stock - B4B	1 pcs	8/7/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	DAS
					Packaging 3 - 9 - B4B	30
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	

JUL 26 2019

JUL 26 2019

				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
210 DC - 1 - B4B	1 pcs	8/7/19	0.00 0.00	DC - 1 - B4B	JUL 26 2019
				DC - 2 - B4B	
220 QC 21 - FG	1 pcs	8/7/19	0.00 0.00	QC 21 - FG - 21	JUL 26 2019
				QC 21 - FG - 70	
				QC 21 - FG - 53	

Part Op 110 - Issue S/N

Descriptions: 115 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

120 - (QC5- Inspect part completeness to step on W/O)

140 - LIQUID PENETRANT INSPECTION AS PER QSI 038

150 - (Receive & Inspect for Damage & Mat'l Certs)

160 - (QC6- All purchased or subcontracted products) 1-Triage parts to be sent out for plating

190 - RE-ASSEMBLE. ***All assembly to be done in accordance with manual*** TEST ASSEMBLY.

195 - (QC5- Inspect part completeness to step on W/O)

200 - (Identify as per dwg & Stock Location: _____)

210 - Photocopy blue file manual and create labels

220 - (QC21- Final Inspection - Work Order Release)

SWA10A-300 BEMING HOUSING 1

S099122

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
SWA25A-3-AR	ELECTRIC SWIVEL 25,000 LB SAFE WORK LOAD (11,340 KG)	1 pcs (1 ea)	110-External Load - Issue SN	
188-FPSS-1032-1/2 Set Screw		1 Ea (1 ea)	190-External Load - 4 - B4B	
188-FPSS-1032-3/8 Set Screw		1 Ea (1 ea)	190-External Load - 4 - B4B	
188-FPSS-1032-5/8 Set Screw		1 Ea (1 ea)	190-External Load - 4 - B4B	S037083
188-FSCS-1032-5/8 Flat socket cap Screw		4 Ea (4 ea)	190-External Load - 4 - B4B	S196435
600.1319	Up Decal	1 pcs (1 ea)	190-External Load - 4 - B4B	S173607
EL314-SJTOW	Long Line Electrical Wire, 14/3 Gauge replace w/ 01004-08-047	6 ft (6 ea)	190-External Load - 4 - B4B	S179682
SWA10A-1100	Upper DU Bearing	1 pcs (1 ea)	190-External Load - 4 - B4B	S199378
SWA10A-1200	Lower DU Bearing	1 Ea (1 ea)	190-External Load - 4 - B4B	S062772
SWA10A-1300	Roller Thrust Bearing	1 Ea (1 ea)	190-External Load - 4 - B4B	S196381
SWA10A-1400	Circlip	1 Ea (1 ea)	190-External Load - 4 - B4B	S077643
SWA10A-400	Thrust Washer	1 pcs (1 ea)	190-External Load - 4 - B4B	S158379
SWA6A-1900	1/4" Female Spade Connector	6 12 Ea (12 ea)	190-External Load - 4 - B4B	S192706
SWA6A-2000	1/8" Female Spade Connector	4 Ea (4 ea)	190-External Load - 4 - B4B	

SWA25A-100 Lower end

S091346

SWA10A-500 SEMI RING Job Allocations 1

S068691

Operation	Component Part	Required	Inventory	Allocated
110-External Load - Issue SN	SWA25A-3	1	0	0
190-External Load - 4 - B4B	188-FPSS-1032-1/2	1	50	0
	188-FPSS-1032-3/8	1	78	0
	188-FPSS-1032-5/8	1	260	0
	188-FSCS-1032-5/8	4	63	0
	600.1319	1	235	0
	EL314-SJTOW	6	0	0
	SWA10A-1100	1	3	0
	SWA10A-1200	1	27	0
	SWA10A-1300	1	12	0
	SWA10A-1400	1	13	0
	SWA10A-400	1	14	0
	SWA6A-1900	12	234	0
	SWA6A-2000	4	567	0

Part Specifications

Specifications could not be found.

Inspection Sheet Complete RA720

Customer QA Ref #

0

Part Number	Original Batch / Serial # / Ctrl #	Original Revision #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Original Container #	New (Receiving) Serial #	New Job #	Work order instructions
SWA25A-3	2990-01		1	☒ Yes	☐ Yes	☐ Yes	☒ Yes			S193458		Overhaul
SWA25A-3	AC11005		1	☒ Yes	☐ Yes	☐ Yes	☒ Yes			S193457		Overhaul
SWA25A-3	AC11003		1	☒ Yes	☐ Yes	☐ Yes	☒ Yes			S193456	OH196926	Overhaul
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					
0			0	☐ Yes	☐ Yes	☐ Yes	☐ Yes					

QC Approval: _____ 0

Date: 0-Jan-00 _____

Special Return/Rework Instructions:



Electric Swivel
SWA25A

Work Order 196926

Customer RA 720

Number of Wires 3

Date 2019-7-5

Serial Number AC 11003

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	25,000	Check for Conductivity against all wires.	- Pass
1	25,000	Check all wires for grounding against swivel body.	- Pass
1	12,500	Check for Conductivity against all wires.	- Pass
1	12,500	Check all wires for grounding against swivel body.	- Pass
1	6,250	Check for Conductivity against all wires.	- Pass
1	6,250	Check all wires for grounding against swivel body.	- Pass
1	0	Check for Conductivity against all wires.	- Pass
1	0	Check all wires for grounding against swivel body.	- Pass

Test Conducted By: Michel Labonde

Signature: _____

Technician

QC 5 Small FAB / QA

Submit



Overhaul Incoming Inspection
SWIVEL

Customer

OH196926

Date

2019 / 07 / 09

Part Number

SWA25A-3

Serial Number

AC11003

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) SWA25A-100 LOWER END

☐

(2) SWA10A-500 SEMI RING

☐

(1) SWA10A-300 BERING HOUSING

☐☐☐☐☐☐☐☐

Inspected By

ALVIN PATRY



972696/HO 906

720

Quantity

TOTAL

2

1-800-556-4166

1-800-556-4166

TOTAL

2

QUALITY

92696170 : 907

RA.#

720

N.D.T



DATE: 2019/07/16



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044027



Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

Attention: Jenne, Heather

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044027

PO Date: 7/17/19

Due Date: 7/23/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	OH196924	SWA25A-3-OH	Electric Swivel 25,000 lb Safe Work Load (11,340 Kg) LIQUID PENETRANT INSPECTION AS PER QSI 038 1 kit = 1 pcs	Firmed	-	7/23/19	1 pcs	0 pcs	1 pcs	\$111.25/pcs	\$111.25
				XI			JUL 19 2019	5193595			DP
	OH196926	5193597	1 kit = 2 pcs	Firmed	XI	7/23/19	1 pcs	0 pcs	1 pcs	\$111.25/pcs	\$111.25
											DP
Sub Total:							2	0	2		\$222.50

2	OH197175	SWA3-3-OH	Electric Swivel 3,000 lb Safe Work Load (1,360 kg) LIQUID PENETRANT INSPECTION AS PER QSI 038 1 kit = 2 pcs	Firmed	-	7/23/19	1 pcs	0 pcs	1 pcs	\$111.25/pcs	\$111.25
				XI			JUL 19 2019	5195136			DP
3	OH197546	C2-OH	C-Series Remote Hook 2,000 lbs Lift Capacity LIQUID PENETRANT INSPECTION AS PER QSI 038 1 kit = 12 pcs	Firmed	-	7/23/19	1 pcs	0 pcs	1 pcs	\$111.25/pcs	\$111.25
				XI			5197048				DP
Grand Total:											\$445.00

DAS
61
9-89



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044027



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 7/18/19 9:19 AM Dart.Guerin.Kimberley

**skyservice****Work Order Traveler**

Sky Service F.B.O. Inc.

10105 Ryan Avenue, Dorval, Quebec, H9P 1A2

TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO41106	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: POHB044027
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:**CARRY OUT ON:**

1 ELECTRIC SWIVEL (1), P/N: SWA25A-3-OH, J/S: OH196924

1 ELECTRIC SWIVEL (2), P/N: SWA25A-3-OH, J/S: OH196926

1 ELECTRIC SWIVEL (2), P/N: SWA3-3-OH, J/S: OH197175

1 C-SERIES REMOTE HOOK (12), P/N: C2-OH, J/S: OH197546

DAS
61
9-89**RECEIVED**

JUL 19 2019

DART AEROSPACE LTD.

Action Taken:						Date:	Initial/Stamp:
LPI & MPI CARRIED OUT IAW ASTM E-1417M-16 AND ASTM E-1444M-16							
NO CRACK FOUND							
PEN , ZL-37 MPO#: 23206 CLEANER SKC-S MPO15030, EMU.(ZR-10B, MPO23451), DEV. MPO15030, UV LIGHT M-20142							
MAGBENCH S/N 208123 CAL DUE: 25-SEP-2019							
POWDER 14A BATCH# MPO13600							
CARRIER II BATCH# MPO22794							
BLACK LIGHT-M20186							
Description	Location	P/N	Qty	Batch	S/N Off	S/N On	

DOT-APP
310
53-89

JUL 18 2019

313

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	ACA/SCA Stamp DOT-APP 310 53-89	Date: JUL 18 2019
Name: RICARDO VARGAS		



Overhaul Incoming Inspection

SWIVEL

Customer

OH196926

Date

2019/07/0

Part Number

SWA25A-3

Serial Number

AC11003

Additional Recommended Replacement Parts

Part Number to Replace

Customer Approval

(1) SWA25A-100 LOWER END

☒ JLC

(2) SWA10A-500 SEMI RING

☒ Rec'd

(1) SWA10A-300 BEARING HOUSING

☒ July 15th

☐

☐

☐

☐

☐

☐

☐

Inspected By

ALAN PATRY

Jennifer Renwick

From: Lacey Cantin
Sent: Monday, July 15, 2019 2:06 PM
To: Jennifer Renwick; Chantal Chartrand
Cc: Linda Lacelle
Subject: RE: 25,000 swivels
Attachments: HTR-5815, HTR-5816

Hi Jen and Linda,

Approved for 17302 + 17522 to continue – updated PO's attached. Customer would like order 17523 returned AS IS with one of the other orders when ready.

@Chantal, can you kindly have the below orders amended to add the following replacement items:

Order 17320 – OH196926 – SN AC11003 – Extra parts approved – see below price breakdown:

- SWA25A-100 - \$863.00
- SWA10A-500 - \$195.00 (each – qty 2 needed so \$390 total)
- SWA10A-300 - \$297.00

Current cost overhaul: \$2,500.00 USD

Order 17522 – OH196924 – SN AC11005 – extra parts approved – see below price breakdown:

- SWA25A-100 - \$863.00
- SWA10A-300 - \$297.00
- SWA10A-600 - \$90.00
- SWA10A-500 - \$195.00
- SWA6A-900B – \$336.00
- SWA6A-800B - \$52.00

Current cost overhaul: \$2,783.00 USD

Let me know if you need more info!

Lacey

From: Jennifer Renwick
Sent: July 10, 2019 10:18 AM
To: Caitlin Crooks <ccrooks@dartaero.com>
Cc: Lacey Cantin <lcantin@dartaero.com>; Linda Lacelle <llacelle@dartaero.com>
Subject: RE: 25,000 swivels

Hi Guys,

Please see attached inspection sheets with extra parts needed.

RA720

Order 17523 – OH196925 – SN 2990-01 – Cannot be overhauled
Order 17320 – OH196926 – SN AC11003 – See attached extra parts
Order 17522 – OH196924 – SN AC11005 – See attached extra parts

Thank you,



**HELICOPTER
TRANSPORT
SERVICES**

Helicopter Transport Services, LLC
14497 Keil Road NE, Aurora, OR 97002
Phone: 503-776-9300 Fax: 503-776-9304
<http://www.htshelicopters.com/>

Overhaul Order #HTR-5815

Date	Jun 17, 2019
Created By	Jerry Sullivan
Type	Overhaul
Currency	USD
Page 1 / 1	

Overhaul Order #HTR-5815

To DART AEROSPACE LTD 1270 ABERDEEN STREET HAWKESBURY ON K6A2H8 CANADA Tel: 613-632-3336, Fax: 613-632-4443 Email: ccrooks@dartaero.com/lcantin@dartaero.com / Lacey Cantin ext 247	Order from UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 USA Tel: 503-776-9300, Fax: 503-776-9305
Ship to UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305	Bill to UAO Helicopter Transport Services, LLC 14497 Keil Rd NE Aurora, OR 97002 Accounting: htsaccounting@htshelicopters.com Procurement: htsparts@htshelicopters.com Tel: 503-776-9300, Fax: 503-776-9305

**** Work to be accomplished at this time ****

Please, perform Overhaul

Parts description

Part Number	Description	Tracking #	Ser/Batch #	TTSN	TTSO	Reg	Est. Cost
SWA25A-3	25,000 LB ELECTRIC SWIVEL	32137	ACI1003				2500.00
C.C	Defect	RA720 Revised 7-12-2019 OH19626 additional parts Certificate of Conformance is required with all repaired / overhauled items. Please notify Helicopter Transport Services if you are unable to comply with this requirement. All quotes or questions should be directed to Jerry Sullivan 503-776-9300 ext 112 sullivanj@htshelicopters.com					

When the work is completed, please return the part(s) via FEDEX ECONOMY no: 2698 8834 2

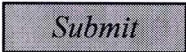
Signature

JUL 15 2019

Date

Work Order OH 196926Customer RA 720Number of Wires 3Date 2019-7-25Serial Number AC 1103

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	25,000	Check for Conductivity against all wires.	- Pass
1	25,000	Check all wires for grounding against swivel body.	- Pass
1	12,500	Check for Conductivity against all wires.	- Pass
1	12,500	Check all wires for grounding against swivel body.	- Pass
1	6,250	Check for Conductivity against all wires.	- Pass
1	6,250	Check all wires for grounding against swivel body.	- Pass
1	0	Check for Conductivity against all wires.	- Pass
1	0	Check all wires for grounding against swivel body.	- Pass

Test Conducted By: Mechel Lalonde
TechnicianSignature: Sylvio Paucher
QC 5 Small FAB / QASubmit



Electric Swivel

SWA25A

Work Order OH 196926Customer RA 720Number of Wires 3Date 2019-7-25Serial Number AC 1103

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	25,000	Check for Conductivity against all wires.	- Pass
1	25,000	Check all wires for grounding against swivel body.	- Pass
1	12,500	Check for Conductivity against all wires.	- Pass
1	12,500	Check all wires for grounding against swivel body.	- Pass
1	6,250	Check for Conductivity against all wires.	- Pass
1	6,250	Check all wires for grounding against swivel body.	- Pass
1	0	Check for Conductivity against all wires.	- Pass
1	0	Check all wires for grounding against swivel body.	- Pass

Test Conducted By:

Michel Lelonde

Technician

Signature:

Sylvie Beucher
QC 5 Small FAB / QASubmit